

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

SEP 2 2 2006

To All Interested Government Agencies and Public Groups:

In accordance with the U.S. Environmental Protection Agency's (EPA) procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed agency action below:

Project Name:

Vernon Town Center Sanitary Collector Sewers

**Purpose of Project:** 

This project involves construction of a municipal

wastewater collection system to alleviate public health and water quality issues associated with inadequate individual on-site septic systems and support planned growth in the

Vernon Town Center area.

**Project Originator:** 

Vernon Township

**Project Location:** 

Sussex County, New Jersey

**Project Description:** 

The proposed project involves construction of

approximately 11,000 linear feet of eight-inch diameter sanitary collector sewers, 4,800 linear feet of six-inch diameter force main, and a wastewater pumping station.

**Estimated Eligible** 

**Project Costs:** 

\$ 2,552,182

**EPA Grants**:

\$ 1,403,700

Our environmental review of this project indicates that no significant adverse environmental impacts will result from the proposed action. Consequently, we have made a decision not to prepare an EIS on the project. This decision is based on a careful review of the project's environmental information document and other supporting information. All of these documents, along with the Environmental Assessment (copy enclosed), are on file at the offices of the EPA Region 2 and Vernon Township, New Jersey, where they are available for public scrutiny upon request. The EA is also available on EPA Region 2's website at http://www.epa.gov/region02/spmm/r2nepa.htm.

Comments supporting or disagreeing with this decision may be submitted to EPA for consideration. All comments must be received within 30 calendar days of the date of this finding of no significant impact (FNSI). Please address your comments to: Grace Musumeci, Chief, Environmental Review Section, at the above address. No administrative action will be taken on the project for at least 30 calendar days after the date of this FNSI.

Sincerely

Alan J. Steinberg Regional Administrator

Enclosure

#### Environmental Assessment

# I. Project Identification

Project Name: Vernon Town Center

Sanitary Collector Sewers

Name and Address of

Applicant:

Vernon Township 21 Church Street

P.O. Box 340

Vernon, New Jersey 14031

Project Location:

Vernon Township

Sussex County, New Jersey

#### II. Description of the Facility Planning Area

Vernon Township is a 69 square mile municipality located in northeastern Sussex County, New Jersey. (Figure 1) It is bordered by West Milford to the east, Hardyston to the south, Wantage to the west, and on the north by Warwick Township in the State of New York. (Figure 2)

Vernon Township experienced rapid growth in the 1960's and 1970's, but remains largely rural in character. Approximately 40 percent of the Township is presently open land owned by the Federal and State governments and the City of Newark's Watershed Area. Farms and farmland still remain, as well as lake resort communities constructed in the 1930's. In addition, there are various newer subdivisions constructed between 1950 and the present. A resort industry is associated with the "Mountain Creek" ski area located south of the Town Center area.

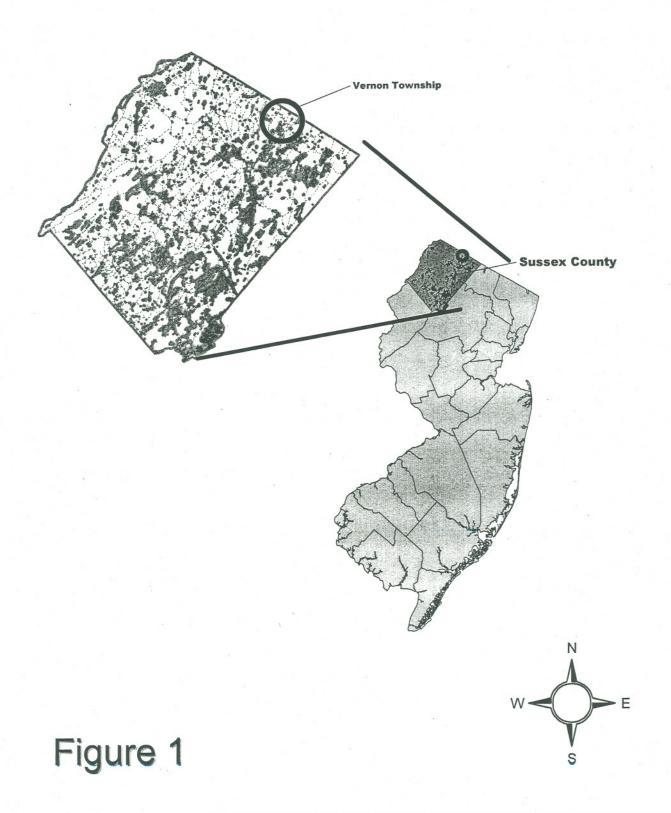
The New Jersey State Planning Commission approved Vernon's designation of a "Town Center" in 2003. Subsequently, the State of New Jersey enacted the New Jersey Highlands Water Protection and Planning Act (N.J.S.A. 13:20, et seq.) which designated certain areas of the Highlands Region of New Jersey as preservation areas. The Town Center area is located outside the Highlands preservation area designated by the State.

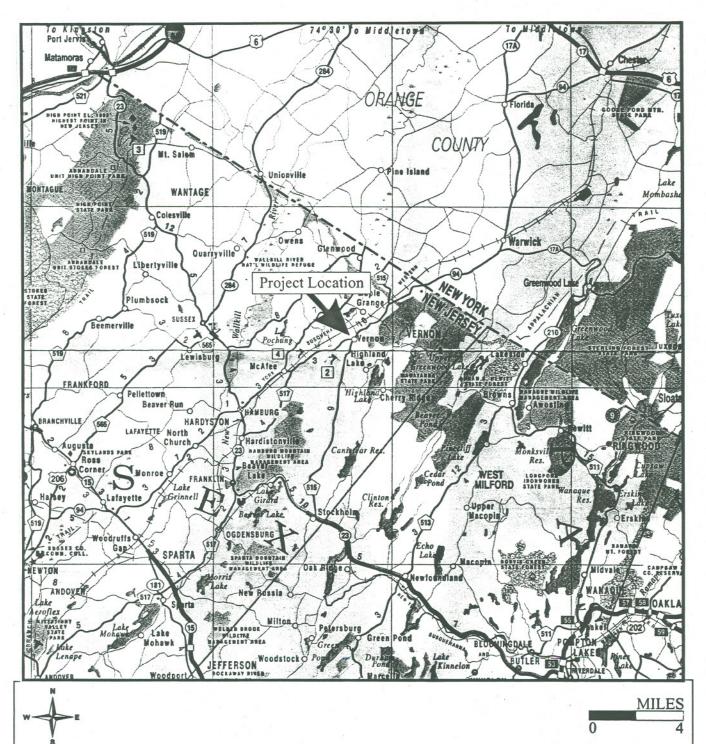
# III. Purpose and Need for Project:

The Vernon Town Center area is presently unsewered and, thus, relies on individual subsurface disposal systems, primarily septic tanks, to dispose of sewage from existing residences and commercial structures. However, due to the shallow depth to bedrock, shallow water table, and the density of the existing development, these disposal systems do not always function properly. Thus, surface and subsurface discharges of inadequately treated sewage result in degradation of surface water and groundwater.

One of the purposes of establishing the Town Center designation was to direct new development there rather than allow it to take place in the outlying open space areas of the Town. The intent was to establish an area where planned growth can be accommodated, and control growth in the outlying areas through a combination of the unavailability of sanitary sewers, open space acquisitions, downzoning, and transfer of development rights. In addition, construction of the affordable housing needed for the Town to fulfill its obligation to the State of New Jersey's Council on Affordable Housing depends partly on availability of an acceptable means of wastewater disposal.

# Site Location Vernon, Sussex County, NJ





Vernon Township Sussex County, NJ

Figure 2

**Project Location** 

Thus, to accommodate the area's existing wastewater management needs and handle the additional volume of wastewater that will be generated by the residential and commercial growth that is currently planned for the Town Center area, a suitable means of wastewater treatment and disposal needs to be available. (Figure 3)

#### IV. Description of Selected Plan

The focus of this environmental assessment, the Vernon Town Center collector sewer project, involves installation of approximately 11,040 linear feet of eight-inch diameter sanitary collector sewers, 4,800 linear feet of six-inch diameter force main, together with a wastewater pumping station. (Figure 4) Wastewater collected from the Town Center area will be conveyed to the Sussex County Municipal Utilities Authority's wastewater treatment facility in Hamburg for treatment and disposal.

# V. <u>Estimated Project Costs</u>

| Estimated EPA Grant-l<br>EPA Grants | Eligible Cost | \$ 2,552,182<br>1,403,700 |
|-------------------------------------|---------------|---------------------------|
|                                     |               |                           |
| Local Share                         |               | \$ 1,148,482              |

#### VI. Evaluation of Alternatives:

#### A. No Action Alternative

The No Action alternative was rejected because it would result in continuation of the existing situation. The Town Center area would continue to use individual onsite wastewater disposal systems, creating water quality problems and potential health hazards due to inadequately treated sewage. Implementation of the Town Center concept to manage growth could not proceed and, in the absence of sanitary sewers, growth would occur on the currently undeveloped vacant lands both inside and outside the NJDEP-approved sewer service area utilizing individual wastewater disposal systems.

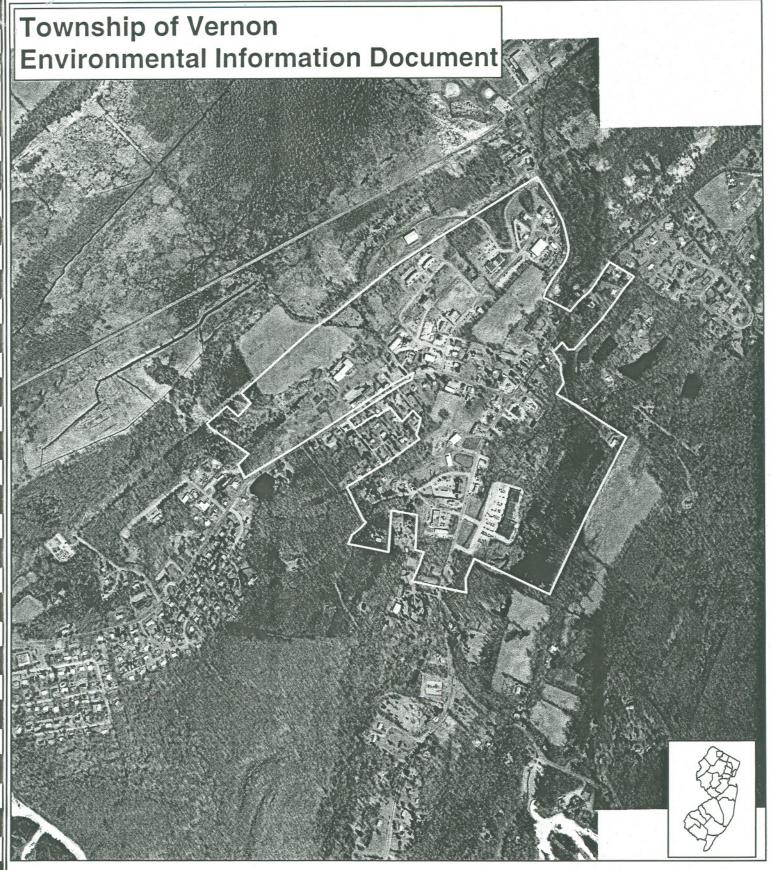
# B. Reconstruction of Existing Individual Treatment Systems

This alternative consists of constructing a low pressure sewer system in conjunction with a small local wastewater treatment system and/or rehabilitating/replacing individual septic tanks. Effluent from each septic tank would be connected to a central wastewater treatment system via low pressure sewers. This method was rejected because it was found to be significantly more expensive to construct and operate than the selected alternative.

# C. Replacement of Individual Septic Tank Systems

This alternative involves installing a new septic tank and an acceptable leach field on properties which currently have inadequate systems, with construction of additional individual septic systems as additional structures are constructed in the Town Center. This alternative was rejected for a variety of reasons, including inadequate lot sizes for installation of new systems, the high cost to property





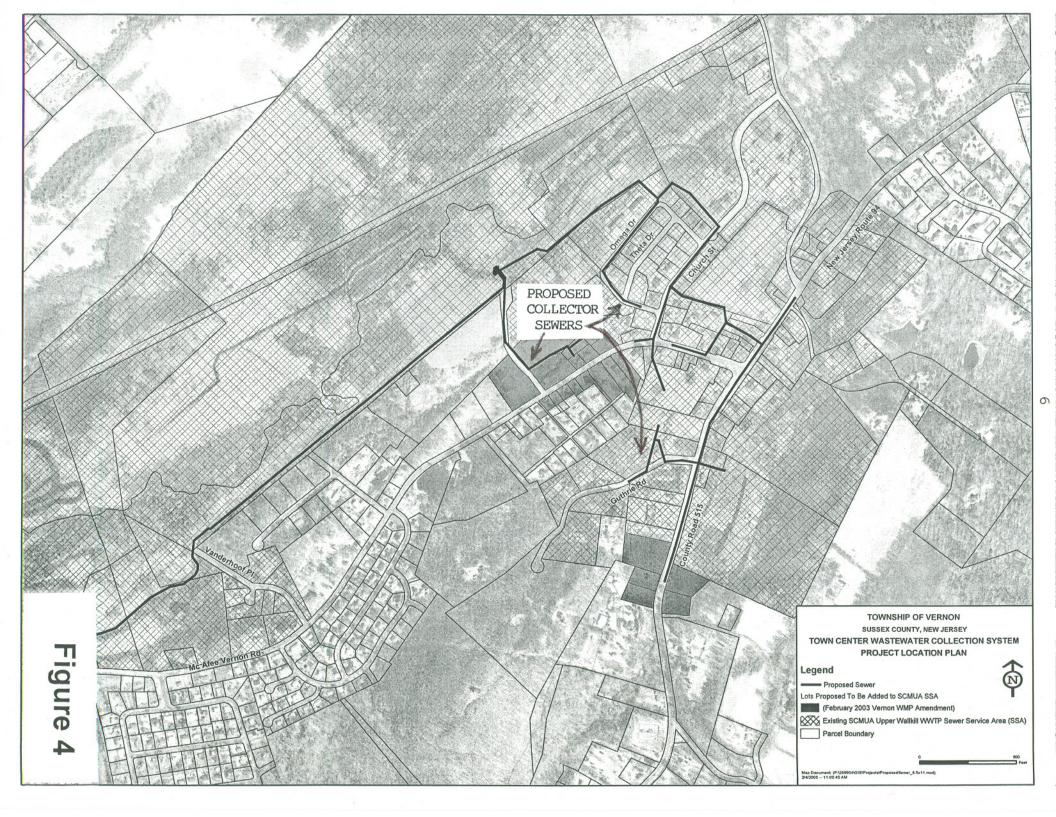
Legend

Approximate Town Center Sewer Service Area

Town Center Sewer Service Area 1999 Aerial Plate 2.2

1,000 Feet

Figure 3



owners, and lack of available space and capacity to accommodate the desired new development of the Town Center.

#### D. Construction of Sanitary Collector Sewers (Selected Plan)

This is the selected alternative discussed in the project description. It was selected as the most economical, environmentally sound, and implementable means available to achieve the project's goals.

# VI. Environmental Consequences of the Selected Plan/Mitigation Measures

#### A. Water Quality

A substantial long-term improvement of local groundwater quality is anticipated as a result of the project. Eliminating groundwater recharge from on-site septic systems may cause minor localized reductions of groundwater levels. However, this is not expected to significantly affect regional groundwater supplies and should result in an improvement in local water quality resulting from preventing pollutants associated with on-site septic systems from reaching groundwater and surface water.

During construction of the project, no sediment or silt-laden water is to be discharged into any stream channel, wetland, or storm sewer. Effective measures will be implemented to minimize any potential adverse impacts of storm water runoff during construction of the project. Thus, water quality will be maintained as a result of sedimentation and erosion control practices.

#### B. Air Quality

The project area is located within the Northwest New Jersey Air Quality Control Region of New Jersey. The area is presently in attainment for all National Ambient Air Quality Standards except ozone. No significant long-term adverse impacts on air quality, including ozone, are expected as a result of this project. The project will, however, eliminate odors from existing malfunctioning on-site septic systems.

There will be some short-term impacts on air quality as a result of construction. These include vehicular emissions from construction equipment and dust generated by earth-moving operations. These impacts will be temporary and localized, however, and can be minimized by requiring proper operation and maintenance of construction equipment, and by sweeping and wetting the construction area to control dust. Thus, the project will not have a significant adverse impact on air quality.

#### C. Noise

During construction there will be increased noise levels in the vicinity of construction activities. This effect will be temporary and localized, and will be minimized by requiring machinery to be equipped with proper mufflers and by limiting construction operations to normal work hours.

#### D. Natural Resources

No impacts to natural resources are anticipated, because most of the proposed project will be constructed within existing roadways, parking lots and grassed areas. Areas of grass and bare soil along roadways will be reseeded following construction.

Implementation of the project is expected to result in long term positive impacts to natural resources. It will assist the Town in minimizing the amount of sprawl-type development that occurs outside the Town Center, because only development within the NJDEP-approved Town Center sewer service area will be able to connect to the sanitary sewers constructed under this project.

#### E. Cultural Resources

A Stage I/II Cultural Resources survey was performed within the area of potential effects of the proposed wastewater collection system. Stage I of the survey included background research concerning the area. Stage II of the survey involved subsurface testing, including excavation of 372 shovel test pits, to ascertain whether any potentially significant archeological resources could be affected by the project.

The background research identified existing information concerning a potentially significant site which may be present in an agricultural field near the St. Thomas Episcopal Church. However, subsurface testing of the route of the proposed sewer line immediately south of this area showed that construction of the sewer line would not affect the site. Based upon the results of the Stage I/II cultural resources survey, the proposed collector sewer project should not affect any cultural resources listed on, or eligible for, the National Register of Historic Places.

However, prior to authorizing any new construction in that particular area, EPA recommends that Vernon Township require appropriate additional testing and implementation of any necessary appropriate mitigation measures in consultation with the New Jersey State Historic Preservation Officer (SHPO).

#### F. Endangered/Threatened Species

Consultation with the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act indicated that there are known occurrences of the bog turtle (*Clemmys muhlenbergii*), a federally-listed threatened species, in the project area. To assist EPA in fulfilling its responsibilities pursuant to the Endangered Species Act, Vernon Township performed a survey of the project area for the presence of potential bog turtle habitat. The survey determined that suitable bog turtle habitat exists along the route of the proposed force main.

Consequently, a mitigation plan was developed for the project in consultation with the U.S. Fish and Wildlife Service (FWS). The mitigation plan involves installing the force main in this area through the use of subsurface directional drilling, with the drill entry and exit points located a minimum of 150 feet from the edge of the associated wetlands to avoid impacting bog turtle habitat. As a result, the project will have no significant impacts on endangered/threatened species.

# G. Other Environmentally Sensitive Areas

The project will not result in any significant impacts to any wetlands, floodplains, important farmlands, sole source aquifer and/or well head protection areas, designated coastal zones, or wild and scenic rivers.

#### H. Growth

The availability of sanitary sewers is intended to direct development to the Town Center area, consistent with the area's Town Center designation, local zoning, and the New Jersey Highlands Preservation legislation. The amount of new development, however, is limited by the existing configuration of available lots, the capacity of the wastewater collection system, the limitations of the NJDEP-approved sewer service area, and by the Town's zoning and site plan review ordinance. Furthermore, any significant modifications to the sewer service area and/or the wastewater management plan for the area would require additional reviews and approvals from the NJDEP and various other agencies. Thus, the project is not expected to result in any significant growth-related impacts.

#### I. Environmental Justice

EPA Region 2's Environmental Justice (EJ) guidance contains criteria for identifying potential EJ communities, based on minority populations and income levels. Based on EPA's review, neither Vernon Township as a whole, nor its designated Town Center area, meet the EPA criteria for being classified an EJ area. As a result, there are no EJ issues associated with the project.

#### J. Cumulative Impacts

The Town Center project is dependent on the successful completion of a related wastewater conveyance and disposal project being implemented by the Sussex County Municipal Utilities Authority (SCMUA). That project will increase the capacity of the SCMUA's existing Upper Wallkill Regional Sewage Treatment Plant and the existing wastewater conveyance facilities which currently convey wastewater from the Mountain Creek ski area to the SCMUA for treatment. That project will provide adequate capacity for the SCMUA to accept and treat additional wastewater flows from both the Mountain Creek area and the Town Center area. Following treatment, wastewater effluent will be used for groundwater recharge in accordance with the requirements of a New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Groundwater Permit.

The SCMUA project and the Town Center sewer project were the subject of a recent Amendment to the Sussex County Water Quality Management Plan (WQMP). After evaluating the proposed WQMP Amendment, including the environmental constraints analysis submitted by the Township, and after considering comments on it from the public, the NJDEP adopted the proposed Amendment. Based on the information and analyses contained in the NJDEP's February 28, 2005 Public Notice concerning its approval of the WQMP Amendment, there are no significant cumulative impacts associated with these projects.

# VII. Coordination of Environmental Review

#### A. Public Participation

Public participation was an integral part of Vernon Township's planning for this project. This includes the processes for obtaining State Planning Commission approval for the Town Center designation and amending the Wastewater Management Plan, deciding whether to provide sewers, and amending the sewer service area.

In addition, the following is a partial list of various other public meetings and hearings about the project which were open to the public:

October 2001 - public meeting to discuss Town Center sewers, with additional meetings in the local community

Spring 2003 - public review of revised Town Center plan

October and November 2003 - public discussion at Town Council meetings

# B. Federal, State, and Local Agencies Consulted by the Town

The N.J. Department of Environmental Protection reviewed the proposed project. It issued a Treatment Works Approval for construction and operation of the project, and subsequently adopted a related Amendment to the Sussex County Water Quality Management Plan.

The U.S. Fish and Wildlife Service was consulted about the endangered/threatened species in the area, pursuant to the Endangered Species Act.

#### VIII. Reference Documents

- Environmental Information Document for the Town Center Wastewater Collection System, Township of Vernon, Killam Associates. September 2002
- Evaluation of Habitat for Bog Turtle Along Proposed Route of Vernon Town Center Wastewater Collection System, Wander Associates. November 16, 2004
- Hydrologic Evaluation of Subsurface Wastewater Discharge Capacity at the Herald Square Site in Vernon Township, Sussex County, New Jersey, prepared for Cerenzio and Panaro, P.C., by Mid-Atlantic Geosciences, LLC. December 2001
- Letter from Gene Osias, Vernon Township, to John Mello, USEPA, about the State of New Jersey's Highlands legislation. June 25, 2004.
- Letter from John Staples, Assistant Supervisor, U.S. Fish and Wildlife Service, N.J. Field Office, in response to EPA's March 31, 2004 request for information on the possible presence of endangered/threatened species in the vicinity of Town Center area. June 28, 2004

- Letter from John Staples, Assistant Supervisor, U.S. Fish and Wildlife Service,
  N.J. Field Office, concurring with the proposed directional drilling plan to avoid impacts to bog turtle habitat. July 31, 2006
- New Jersey Pollutant Discharge Elimination System (NJPDES) Permit No. NJ0145688 issued to Sussex County MUA, New Jersey Department of Environmental Protection. April 29, 2005
- Permit No. 04-0556, to Construct and Operate Treatment Works, for the Town Center Wastewater Collection System, New Jersey Department of Environmental Protection. December 30, 2004
- Public Notice of Adopted Amendment to the Sussex County Water Quality Management Plan, New Jersey Department of Environmental Protection -Division of Watershed Management. February 23, 2005
- Response to EPA Review Comments on the Environmental Information Document, Hatch Mott MacDonald Engineers. December 31, 2003
- Stage I Cultural Resources Survey, Vernon Wastewater Collection System, Richard Grubb Associates. July 2003
- Stage I/II Cultural Resources Survey, Vernon Wastewater Collection System, Vernon Township, Sussex County, New Jersey, Richard Grubb Associates. November 2004
- Technical Report, Vernon Township Groundwater Disposal Beds NJPDES DGW Application for Upper Wallkill Wastewater Treatment Plant, Sussex County Municipal Utilities Authority, Cerenzio & Panaro, P.C., Consulting Engineers. June 2003